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10/080,671	02/25/2002	Charles Edward Anderson IV	1875.1990000	8173

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EXAMINER

PATEL, CHIRAG R

ART UNIT PAPER NUMBER

2141

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/080,671	<b>Applicant(s)</b> ANDERSON, CHARLES EDWARD	
	<b>Examiner</b> Chirag R. Patel	<b>Art Unit</b> 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                                  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____   |

***Response to Arguments***

Applicant's arguments filed August 17, 2006 have been fully considered but they are not persuasive. Examiner submits this non-final office action in response to an interview that applicant's claim that applicant's remarks and claim limitations were not addressed. A discussion is provided below.

Examiner argues that a personal computer (PC) can be broadly interpreted as a server by a person of ordinary skill in the art as applicant failed to define an explicit definition of 'personal computer' in the specification. (See MPEP 2111)

Heutema discloses per (Col 4 lines 36-51) "Web lookup 415 employs web spiders, which are software processes that visit web sites and automatically explore their contents, to obtain MFU DNs" and reads on claim limitations "searching files in memory that comprise application data files that hold frequently accessed domain names".

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-5, 7-10, 13-14, 16-25, 27-33, 35-40, and 42-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Huitema (US 6,016,512).

As per claim 1, Huitema discloses a method for identifying frequently accessed domain names in a personal computer that includes a memory and a communication interface, the frequently accessed domain names to be provided to a network gateway for use in domain name system caching, comprising the steps of:

a) searching files in the memory to identify the frequently accessed domain names; and (Col 4 lines 36-51; Web lookup 415 employs web spiders, which are software processes that visit web sites and automatically explore their contents, to obtain MFU DNs)

b) providing the frequently accessed domain names to the communication interface for transmission to the network gateway over a communication path; (Col 4 lines 36-51; Feedback process of ISP control cache servers 435 and edge local cache servers 445 collect statistics of the MFU DNs and send this data to central DNS database 410, Col 3 lines 28-43; Figure 3: item 300; network as communication path)

wherein the files in the memory comprise application data files that hold frequently accessed domain names. (Col 4 lines 36-51)

As per claims 4 and 13, Huitema discloses the method of claim 10, wherein steps (a) and (b) occur in response to the execution of an application by a user of the personal computer (Col 5 lines 25-35)

As per claims 5, 14, 25, 33, and 40, Huitema discloses the method of claim 10, wherein step (a) comprises searching application data files associated with a Web browser application. (Col 5 lines 5-25)

As per claims 7, 16, 27, 35 and 42, Huitema discloses the method of claim 10, wherein step (b) comprises storing the frequently accessed domain name and transmitting the packetized information to the network gateway. (Col 5 lines 15-25)

As per claims 8, 17, 28, 36 and 43, Huitema discloses the method of claim 10, wherein step (b) comprises storing said frequently accessed domain name in a management information base and providing the management information base to the network gateway. (Col 5 lines 15-25)

As per claims 9, 18, 29, 37 and 44, Huitema discloses the method of claim 10, wherein step (b) comprises transmitting the domain name system query to a domain name server on the network for resolution. (Col 4 lines 25-35)

As per claims 10 and 21 Huitema discloses a method for selectively caching domain name system information on a network gateway that includes a cache, wherein the network gateway is attached to a personal computer that includes a memory, comprising the steps of:

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(a) searching files in the memory to identify a frequently accessed domain name;  
(Col 4 lines 36-51 )

(b) providing the frequently accessed domain name from the personal computer to the network gateway; (Col 4 lines 36-51)

(c) generating, in the gateway, a domain name system query that includes the frequently accessed domain name; (Col 2 lines 34-41, Col 3 lines 17-26)

(d) transmitting the domain name system query from the network gateway to a network for resolution; (Col 5 lines 15-35, Figure 5)

(e) receiving, in the gateway, a response to the domain name system query from the network that includes the frequently accessed domain name and a corresponding IP address; and (Col 5 lines 15-35, Figure 5)

(f) storing the frequently accessed domain name and the corresponding IP address in the cache; (Col 4 lines 36-51)

wherein the files in the memory comprise application data files that hold frequently accessed domain names. (Col 4 lines 36-51)

As per claims 19 and 38, Huitema discloses the method of claim 10, wherein step (c) comprises generating a domain name system query in accordance with an iterative resolution protocol. (Col 3 lines 27-43, protocol being DNS)

As per claim 20, Huitema discloses the method of claim 10, further comprising:

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(g) receiving, in the network gateway, a domain name system query from the personal computer;

(h) resolving, in the network gateway, the domain name system query from the personal computer using a domain name and corresponding IP address stored in the cache.

(Col 5 lines 25-35)

As per claims 22 and 39, Huitema discloses a personal computer, comprising: a memory that stores files, wherein the files comprise application data files that hold frequently accessed domain names; (Col 1 lines 29-39)

a communication interface for transmitting information to a network gateway; and a processor coupled to the memory and the communication interface; (Col 3 lines 17-27, inherent to Figure 3, item 310)

wherein said processor is configured to search the files in the memory to identify frequently accessed domain names and to provide the frequently accessed domain names to the communication interface for transmission to the network gateway. (Col 4 lines 36-51)

As per claims 23 and 31, Huitema discloses the customer premises equipment of claim 22, wherein said memory comprises a hard disk drive. (Col 3 lines 17-27, 3 million records in its database)

As per claims 24 and 32, Huitema discloses the customer premises

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equipment of claim 22, wherein said communication interface is a home phonenumber network interface, an Ethernet interface or a Universal Serial Bus interface. (Col 3 lines 17-27)

As per claim 30, Huitema discloses a system for selectively caching domain name system information in a network gateway, comprising:

a personal computer (PC) including a memory that stores files, a communication interface for transmitting information over a communication path, and a PC processor coupled to the memory and the communication interface, wherein the PC processor is configured to search the files to identify a frequently accessed domain name and to provide the frequently accessed domain name to the communication interface for transmission over the communication path; and (Col 4 lines 36-51)

a network gateway including a cache, a PC interface for receiving information over the communication path, a network interface for transmitting information over a network, and a gateway processor coupled to the cache, the PC interface, and the network interface, the gateway processor configured to receive the frequently accessed domain name from the communication path via the PC interface, to generate a domain name system query that includes the frequently accessed domain name, to provide the query to the network interface for transmission to a network for resolution, to receive a response to the query from the network via the network interface that includes the frequently accessed domain name and a corresponding IP address, and to store the frequently accessed domain name and the corresponding IP address in



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the cache. (Col 2 lines 34-41, Col 3 lines 17-26, Col 4 lines 36-51, Col 5 lines 15-35, Figure 5)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huitema (US 6,016,512) in view of Majewski et al. –hereinafter – Majewski (US 2002/0126812).

As per claims 2 and 11, Huitema discloses the method of claim 10, wherein the personal computer runs an operating system. (Col 3 lines 17-27, inherent to the computer 110) Huitema fails to disclose wherein steps (a) and (b) are initiated during start-up of the operating system. Majeswski discloses steps (a) and (b) are initiated during start-up of the operating system. ([0094]). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to initiate searching and providing the frequently accessed domain names by the operating system. The motivation for doing do would have been to transfer large amounts of data from a

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number of mainframe systems to a central data base in a timely manner with minimal human involvement. ([0017])

As per claim 3 and 12, Huitema discloses the method of claim 10, wherein the personal computer runs an operating system. (Col 3 lines 17-27, inherent to the computer 110) Huitema fails to disclose wherein steps (a) and (b) are initiated periodically by the operating system. Majeswski discloses wherein the personal computer runs an operating system, and wherein said searching and said providing are initiated periodically by said operating system. ([0094], scheduler) At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to periodically search and provide in the disclosure of Huitema. The motivation for doing do would have been to transfer large amounts of data from a number of mainframe systems to a central data base in a timely manner with minimal human involvement. ([0017])

Claims 6, 15, 26, 34, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huitema (US 6,016,512) in view of Evgey (US 2002/0120783).

As per claims 6, 15, 26, 34 and 41, Huitema discloses the method of claim 10. Huitema fails to disclose wherein step (a) comprises searching application data files associated with an electronic email application. Evgey discloses wherein step (a) comprises searching application data files associated with an electronic mail

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application. ([0035]) At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to search files associated with an electronic email application in the disclosure of Huitema. The motivation for doing do would have been for the file to become a depository and a source for other recipients. ([0035])

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag R. Patel whose telephone number is (571)272-7966. The examiner can normally be reached on Monday to Friday from 7:30AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia, can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pairedirect.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

  
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SUPERVISORY PATENT EXAMINER